

SEQUENCE LISTING

<110> BISHOP-HURLEY, SHARON L.  
SCHMIDT, FRANCIS J.  
SMITH, ARNOLD L.

<120> PHAGE-DISPLAY PEPTIDES AS NOVEL ANTIMICROBIAL AGENTS  
AGAINST HAEMOPHILUS INFLUENZAE

<130> UVMO:022US

<140> UNKNOWN  
<141> 2003-09-04

<150> 60,409,909  
<151> 2002-09-11

<160> 8

<170> PatentIn Ver. 2.1

<210> 1  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
Peptide

<400> 1  
Ile Thr Phe Thr Gly  
1 5

<210> 2  
<211> 19  
<212> PRT  
<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic  
Peptide

<400> 2  
Ala Cys Gly Gly Ala Cys Ala Gly Ala Thr Gly Cys Ala Gly Ala Thr  
1 5 10 15

Thr Gly Gly

<210> 3  
<211> 22  
<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

<400> 3

Cys Cys Gly Ala Gly Gly Cys Cys Ala Gly Thr Thr Gly Ala Gly Ala  
1 5 10 15

Thr Cys Ala Gly Thr Cys  
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<210> 4

<211> 333

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic Peptide

<400> 4

Ala Glu Thr His Val Thr Gly Gly Ser Ala Gly His Thr Val Ser Gly  
1 5 10 15

Phe Val Ser Leu Leu Ala Pro Gly Ala Lys Gln Asn Val Gln Leu Ile  
20 25 30

Asn Thr Asn Gly Ser Trp His Leu Asn Ser Thr Ala Leu Asn Cys Asn  
35 40 45

Asp Ser Leu Asn Thr Gly Trp Leu Ala Gly Leu Phe Tyr His His Lys  
50 55 60

Phe Asn Ser Ser Gly Cys Pro Glu Arg Leu Ala Ser Cys Arg Pro Leu  
65 70 75 80

Thr Asp Phe Asp Gln Gly Trp Gly Pro Ile Ser Tyr Ala Asn Gly Ser  
85 90 95

Gly Pro Asp Gln Arg Pro Tyr Cys Trp His Tyr Pro Pro Lys Pro Cys  
100 105 110

Gly Ile Val Pro Ala Lys Ser Val Cys Gly Pro Val Tyr Cys Phe Thr  
115 120 125

Pro Ser Pro Val Val Val Gly Thr Thr Asp Arg Ser Gly Ala Pro Thr  
130 135 140

Tyr Ser Trp Gly Glu Asn Asp Thr Asp Val Phe Val Leu Asn Asn Thr  
145 150 155 160

Arg Pro Pro Leu Gly Asn Trp Phe Gly Cys Thr Trp Met Asn Ser Thr

165	170	175
Gly Phe Thr Lys Val Cys Gly Ala Pro Pro Cys Val Ile Gly Gly Ala		
180	185	190
Gly Asn Asn Thr Leu His Cys Pro Thr Asp Cys Phe Arg Lys His Pro		
195	200	205
Asp Ala Thr Tyr Ser Arg Cys Gly Ser Gly Pro Trp Ile Thr Pro Arg		
210	215	220
Cys Leu Val Asp Tyr Pro Tyr Arg Leu Trp His Tyr Pro Cys Thr Ile		
225	230	235
Asn Tyr Thr Ile Phe Lys Ile Arg Met Tyr Val Gly Gly Val Glu His		
245	250	255
Arg Leu Glu Ala Ala Cys Asn Trp Thr Arg Gly Glu Arg Cys Asp Leu		
260	265	270
Glu Asp Arg Asp Arg Ser Glu Leu Ser Pro Leu Leu Leu Thr Thr Thr		
275	280	285
Gln Trp Gln Val Leu Pro Cys Ser Phe Thr Thr Leu Pro Ala Leu Ser		
290	295	300
Thr Gly Leu Ile His Leu His Gln Asn Ile Val Asp Val Gln Tyr Leu		
305	310	315
Tyr Gly Val Gly Ser Ser Ile Ala Ser Trp Ala Ile Lys		
325	330	

<210> 5  
 <211> 24  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 Peptide

<400> 5  
 Ala Ser Pro Thr Tyr Arg Leu Tyr Ser Ala Ser Pro Ala Ser Pro Ala  
 1               5               10               15  
 Ser Pro Ala Ser Pro Leu Tyr Ser  
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<210> 6  
 <211> 15  
 <212> PRT  
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
Peptide

<400> 6

Gly Ser Arg Gly Lys His Thr Phe Val Arg Pro Thr Leu Val Phe  
1 5 10 15

<210> 7

<211> 15

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic  
Peptide

<400> 7

Phe Ile Ser Tyr Ser Ser Pro Ser His Met Gly Ala Arg Met Arg  
1 5 10 15

<210> 8

<211> 43

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic  
Peptide

<400> 8

Ala Ala Thr Thr Ala Ala Thr Ala Cys Gly Ala Cys Thr Cys Ala  
1 5 10 15

Cys Thr Ala Thr Ala Gly Gly Cys Ala Ala Ala Cys Gly Ala Cys Thr  
20 25 30

Gly Thr Cys Cys Thr Gly Gly Cys Cys Gly Thr  
35 40

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1 5 10 15

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<213> Artificial Sequence

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Ala Glu Thr His Val Thr Gly Gly Ser Ala Gly His Thr Val Ser Gly  
1 5 10 15

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35 40 45

Asp Ser Leu Asn Thr Gly Trp Leu Ala Gly Leu Phe Tyr His His Lys  
50 55 60

Phe Asn Ser Ser Gly Cys Pro Glu Arg Leu Ala Ser Cys Arg Pro Leu  
65 70 75 80

Thr Asp Phe Asp Gln Gly Trp Gly Pro Ile Ser Tyr Ala Asn Gly Ser  
85 90 95

Gly Pro Asp Gln Arg Pro Tyr Cys Trp His Tyr Pro Pro Lys Pro Cys  
100 105 110

Gly Ile Val Pro Ala Lys Ser Val Cys Gly Pro Val Tyr Cys Phe Thr  
115 120 125

Pro Ser Pro Val Val Val Gly Thr Thr Asp Arg Ser Gly Ala Pro Thr  
130 135 140

Tyr Ser Trp Gly Glu Asn Asp Thr Asp Val Phe Val Leu Asn Asn Thr  
145 150 155 160

Arg Pro Pro Leu Gly Asn Trp Phe Gly Cys Thr Trp Met Asn Ser Thr  
165 170 175

Gly Phe Thr Lys Val Cys Gly Ala Pro Pro Cys Val Ile Gly Gly Ala  
180 185 190

Gly Asn Asn Thr Leu His Cys Pro Thr Asp Cys Phe Arg Lys His Pro  
195 200 205

Asp Ala Thr Tyr Ser Arg Cys Gly Ser Gly Pro Trp Ile Thr Pro Arg  
210 215 220

Cys Leu Val Asp Tyr Pro Tyr Arg Leu Trp His Tyr Pro Cys Thr Ile  
225 230 235 240

Asn Tyr Thr Ile Phe Lys Ile Arg Met Tyr Val Gly Gly Val Glu His  
245 250 255

Arg Leu Glu Ala Ala Cys Asn Trp Thr Arg Gly Glu Arg Cys Asp Leu  
260 265 270

Glu Asp Arg Asp Arg Ser Glu Leu Ser Pro Leu Leu Leu Thr Thr Thr  
275 280 285

Gln Trp Gln Val Leu Pro Cys Ser Phe Thr Thr Leu Pro Ala Leu Ser  
290 295 300

Thr Gly Leu Ile His Leu His Gln Asn Ile Val Asp Val Gln Tyr Leu  
305 310 315 320

Tyr Gly Val Gly Ser Ser Ile Ala Ser Trp Ala Ile Lys  
325 330

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Ala Ser Pro Thr Tyr Arg Leu Tyr Ser Ala Ser Pro Ala Ser Pro Ala  
1 5 10 15  
  
Ser Pro Ala Ser Pro Leu Tyr Ser  
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<211> 15  
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<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic Peptide

<400> 6  
Gly Ser Arg Gly Lys His Thr Phe Val Arg Pro Thr Leu Val Phe  
1 5 10 15

<210> 7  
<211> 15  
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<213> Artificial Sequence

<220>  
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1 5 10 15

Cys Thr Ala Thr Ala Gly Gly Cys Ala Ala Ala Cys Gly Ala Cys Thr  
20 25 30

Gly Thr Cys Cys Thr Gly Gly Cys Cys Gly Thr  
35 40